Fri (1/5/20), Cl-X, EVS,

Ch-5 Topic (Food)

Home Assignment.....

1) What do you mean by sustainable agriculture?
2) What are the different sustainable agriculture practices?
3) What is the need for sustainable agriculture?
4) How can we help sustainable agriculture?
5) How can we save and promote agriculture?

...(To be continued next class....)

class X

'চাঁদের পাহাড়'

বিভূতিভূষণ বন্দ্যোপাধ্যায়

(উপন্যাস)

* 'হঠাৎ সে জল ছাড়া ফেলে, অন্যজলের মধ্যে কোথায় যেন ক্ষীণ জলের শব্দ পাওয়া যাচ্ছে'

i) কে?

ii) সে কোথায় জলের ক্ষীণ ধারা শুনতে পেল?

iii) এরপর কথক-চরিত্রের জলের উৎসে পৌঁছাল?

iv) সে স্থানে তার কিরূপ অনুভূতি দেখা দিল?

(উত্তর)

i) বিভূতিভূষণ বন্দ্যোপাধ্যায় রচিত 'চাঁদের পাহাড়' উপন্যাসের 'ক' চরিত্র অন্ধকারে কোনোমতে হেঁটে চলছে। সে এক-এ পাস করেছে, মজিল শুধু বন্ধুদের সঙ্গে আড্ডা, দুপুরে আহারান্তে ঘুম, বিকেলে বেড়াতে গিয়ে ফিরে যাওয়া ইত্যাদি ছিল তার কাজ।

ii) অঁধার সুরার মধ্যে পাস হারিয়ে ফেলেছিল। অবশ্য হয় সে সুরার মধ্যে একটু ঘুমিয়ে পড়েছিল যখন ঘুম ভাঙলো তখন ঘড়িতে ৮ বেজে গেছে। সে উঠে আবার পথে আরম্ভ করে। হঠাৎ জল ছাড়া পরে সে জলের কুল কুল শব্দ শুনতে পায়।

iii) অন্ধকার আকাশে পাহাড়ের দেওয়ালের ওপার থেকে। হামাগুড়ি দিয়ে অঁধার সন্তর্পণে যেতেই হাত ৪-৫ ডা জল ঠেকলো, সেখানে দাঁড়িয়ে উঠতেই পায়ের পাতা ৪-৫ ডা জল ডুবে গেল। অঁধার নীচু হয়ে হাত দিয়ে ৪-৫ ডা জল আনন্দ জেল। তারপর ধীরে ধীরে জলের গতি লক্ষ্য করে সেই ফিরিঙ্গি অন্ধকারে পায়ে পায়ে জলের ধারা অনুসরণ করতে করতে অনেকটা দূর এগিয়ে গিয়ে সে চলতে লাগল।

iv) এত ভয়ানক ঘোর অঁধার আবার দিশেহারা হয়ে পড়ে। সেখানে জলের ধারা বিভক্ত হয়ে এদিকে ওদিকে চলে গিয়েছে। ছিন্ন রোগে যাবার মত বিচ্ছিন্ন খুঁজতে গিয়ে অজস্র সুড়ি দেখতে পেল। সে অনেকগুলি নুড়ি পাথর তুলে নিল। সে শিহরে উঠে জলের প্রত্যেকটি ধারা সে পরীক্ষা করে। মনের স্রোতের ধারা আবার গোলমাল হয়ে যায়। ওই অন্ধকারের মুখেও পড়ে। খাইরোড গ্রামের নিষ্ঠুরাকৃতি সুরার মুখ দেখতে পায়। এবং সুরার বইয়ে এসে পৌঁছায়।

Class - 10 assign. 2.5.2020

नेता जी का चश्मा

Q2) "लेकिन आदत से मजबूर आँखे चौराहा आते ही मूर्ति के तरफ उठ गई ।कुछ ऐसा देखा कि चीखें, "रोको" ! जीप स्पीड में थी ,ड्राइवर ने जोर से ब्रेक मारी ।रास्ता चलते लोग देखने लगे ।

क) हालदार साहब किस आदत से मजबूर थे ? वे कस्बे में कितने दिन बाद आये थे और क्यों ?

उत्तर - हालदार साहब प्रायः कस्बे से गुजरते थे ।वे वहाँ से गुजरते समय चौराहे पर रुकते थे पान खाते थे ।पान खाते समय वे नेताजी की मूर्ति को ध्यानपूर्वक देखते थे ।बस इसी आदत से वे मजबूर थे ।

हालदार साहब इस बार पंद्रह दिन बाद कस्बे में आये थे। क्योंकि वे सोचते थे कि कैप्टेन चस्मेवाले की मृत्यु हो जाने के कारण अब उस पर चश्मा नही होगा ।अतः वह उस ओर देखेंगे भी नही ।

ख) नेताजी की मूर्ति के सामने हालदार साहब अटेंशन में क्यों खड़े हो गए ?

उत्तर -- हालदार साहब कस्बे के चौराहे पर जैसे ही पहुँचे तो न चाहते हुए भी उनकी दृष्टि मूर्ति की ओर उठ गई अचानक जीप रुकवा कर वे जीप से कूद कर नेताजी की मूर्ति के सामने जाकर सावधान की मुद्रा में खड़े हो गए ।मूर्ति पर आज भी चश्मा था पर वह सरकंडे का था। इस चश्मे को देखकर हालदार साहब भावुक हो गए क्योंकि हालदार साहब स्वयं एक देश भक्त व्यक्ति थे , इसलिये मूर्ति के सामने अटेंशन की हालत में खड़े होकर उन्होंने एक सच्चे देशभक्त का सम्मान किया ।

ग) मूर्ति पर सरकंडे का चश्मा देखकर हालदार साहब की मनोदशा कैसी थी ?

उत्तर - नेताजी की आँखों पर सरकंडे का चश्मा (जिसे छोटो बच्चों ने खेल - खेल में बनाया था) देखकर हालदार साहब भावुक हो गए थे । उनके नेत्रो से आंसू निकलने लगे थे ।उन्हें लगा की चलो ,इस कस्बे से देशभक्ति समाप्त नही हुई है । आज भी मनुष्यो में देश प्रेम के भाव है , यहाँ तक कि बच्चों में भी। और यही सोच कर उनकी आँखें सजल हो उठी ।

घ) " नेताजी का चश्मा" कहानी हमे क्या संदेश देती है ?

उत्तर - नेताजी का चश्मा" कहानी देश भक्ति से परिपूर्ण है ।इस कहानी के माध्यम से लेखक ने यह संदेश दिया है कि देशभक्ति किसी वर्ग की गुलाम नही है वह टी जाति - पति ,अमीर - गरीब , बूढ़े जवान सभी के अंदर समाहित होनी चाहिए हमे देश भक्तो का आदर करना चाहिए तथा सभी देशवासियों को देश के प्रति बलिदान करने के लिये सदैव तत्पर रहना चहिए। हमे किसी के तुच्छ से तुच्छ देश के प्रति योगदान का उपहास नही करना चहिये जिस प्रकार पान वाले ने कैप्टन चश्मेवाले का उपहास किया ।

Mathematics- Locus

Class -X

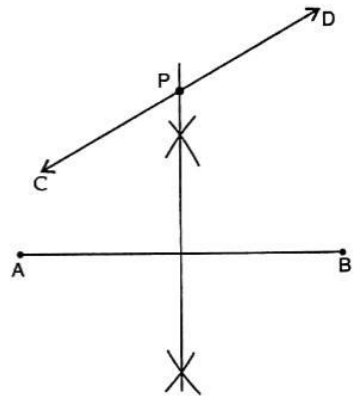
Assignment:- Date:-02.05.20

Example 1 Find a point P in a given line CD which is equidistant from two fixed points A and B.

Solution. Let the given line CD and the fixed points A, B be as shown in the figure alongside.

Join AB and construct perpendicular bisector of AB.

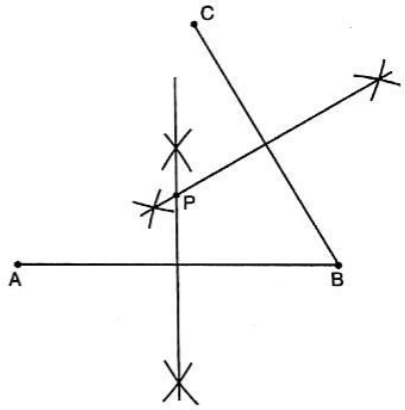
As P is equidistant from the points A and B, it lies on the perpendicular bisector of AB. Also the point P lies on CD, therefore, the required point P is the point of intersection of the perpendicular bisector of AB and the line CD.



Example 2 Find a point P which is equidistant from three given non-collinear points.

Solution. Let A, B and C be three given non-collinear points as shown in the figure alongside.

As the point P is equidistant from the points A and B, it lies on the perpendicular bisector of AB. Also as the point P is equidistant from the points B and C, it lies on the perpendicular bisector of BC. Construct perpendicular bisectors of AB and BC. Then the required point P is the point of intersection of the perpendicular bisectors of AB and BC.

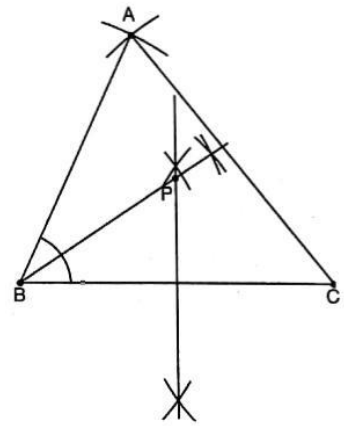


Example 3 Construct a triangle ABC in which BC = 5 cm, CA = 4·6 cm and AB = 3·8 cm. Find by construction a point P which is equidistant from BC and AB, and also equidistant from B and C.

Solution. Construct ΔABC with the given data.

As the point P is equidistant from the intersecting lines BC and AB, it lies on the bisector of $\angle ABC$. Also as the point P is equidistant from the point B and C, it lies on the perpendicular bisector of the line segment BC.

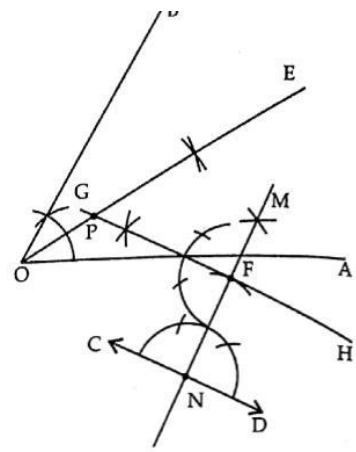
Construct bisector of $\angle ABC$ and the perpendicular bisector of BC. Then the required point P is the point of intersection of the bisector of $\angle ABC$ and the perpendicular bisector of BC.



Example 4 Construct $\angle AOB = 60°$. Mark a point P equidistant from OA and OB such that its distance from another given line CD is 2·5 cm.

Solution. Construct $\angle AOB = 60°$ as shown in the figure. As the point P is equidistant from the intersecting lines OA and OB, it lies on the bisector of $\angle AOB$. Construct OE, the bisector of $\angle AOB$.

Let CD be the other given line. Take any point N on CD and draw a perpendicular MN to CD. Cut off NF = 2·5 cm, and through F draw a straight line GH parallel to CD. Let GH meet OE at point P. Then P is a required point which is equidistant from the lines OA and OB, and is also at a distance 2·5 cm from another given line CD.



Remark

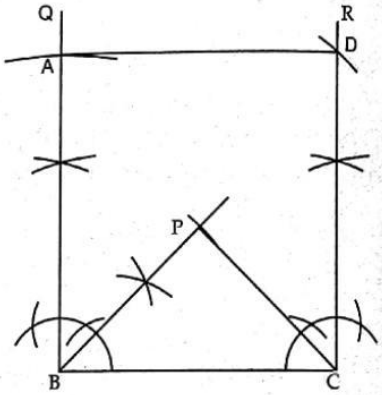
If we draw GH ∥ CD on the other side of CD, then GH will intersect OE at some other point, say Q. Thus, we get one more point satisfying the given conditions.

Example 5 Construct triangle BCP, where BC = 5 cm, BP = 4 cm, ∠PBC = 45°. Complete the rectangle ABCD such that

(*i*) P is equidistant from AB and BC; and (*ii*) P is equidistant from C and D.

Measure and record the length of AB.

Solution. ***Steps of construction.***

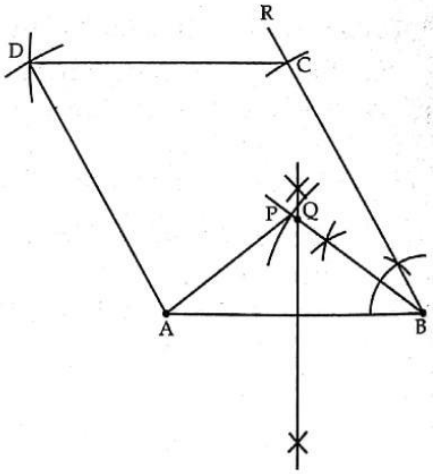


1. Construct ΔBCP with the given data.
2. Since P is equidistant from AB and BC, P lies on the bisector of ∠ABC. But ∠CBP = 45°, therefore, A lies on the perpendicular to CB at B. Construct BQ ⊥ CB.
3. Construct CR ⊥ CB.
4. Since P is equidistant from C and D, PD = PC. With P as centre, radius equal to CP, draw an arc to meet CR at D.
5. With B as centre, radius equal to CD, draw an arc to meet BQ at A. Join AD.

Length AB = 5·7 cm approximately.

Example 6 Construct a triangle ABP such that AB = 5 cm, BP = 3 cm and ∠ABP = 30°. Complete rhombus ABCD such that P is equidistant from AB and BC.

Locate the point Q on the line BP such that Q is equidistant from A and B.



Solution. ***Steps of construction.***

1. Construct ΔABP with the given data.
2. Since P is equidistant from AB and BC, P lies on the bisector of ∠ABC. But ∠ABP = 30°, therefore, construct ∠ABR = 60°. Cut off BC = 5 cm from BR.
3. Complete rhombus ABCD.
4. Since Q is equidistant from A and B, draw perpendicular bisector of AB. The point of intersection of the right bisector of AB and the line BP is the required point Q.

Home Work-

1. A point moves such that its distance from a fixed line AB is always the same. What is the relation between AB and the path travelled by P?
2. A point P moves so that its perpendicular distances from two given lines AB and CD are equal. State the locus of the point P.
3. P is a fixed point and a point Q moves such that the distance PQ is constant. What is the locus of the path traced out by the point Q?
4. (*i*) AB is a fixed line. State the locus of the point P so that $\angle APB = 90°$.

   (*ii*) A, B are fixed points. State the locus of P so that $\angle APB = 60°$.

Class X

02.05.2020

History

First World War

Formation of the League of Nations

One of the significant consequences of this war was the origination of the League of Nations. The fears of the war convinced all leaders of the world that there must be a mechanism to stop war and promote international cooperation. Thus, the League of Nations was created as a world organisation of all independent states in 1920, 10th January.

Headquarter – Geneva in Switzerland.

Organs – It had six main organs – a) The assembly b) The Secretariat C) The League of Council D) Permanent Court of International Justice e) International Labour Organisation f) The Mandate Commission.

Objectives of the League of Nations were as follows:

1. States were prohibited from entering into secret treaties and alliances.
2. Member states were restricted to maintain huge armies, warships and destructive armaments.
3. The major aim of the League of Nations was to settle disputes among the member states and to maintain peace and order.
4. The League of Nations was supposed to promote political, social , cultural and economic cooperation among the member states.
5. All the states were to respect each other's independence.
6. The member states had to heed to the directions of the League against any State trying to disturb world peace and order.

But, unfortunately the League came to an end when Hitler committed an aggression on Poland, which marked the start of the Second World War in 1939-45.

HOME WORK

1. Why was the League of Nations formed after the First World War?
2. What was the main objectives of the League of Nations?
3. Who was murdered of June 28,1914 at Sarajevo?
4. How much did Germany had to pay as war reparation charges according to the Treaty of Versailles?
5. Mention the time Period of the First World War.

CLASS-X

SUBJECT – GEOGRAPHY

CHAPTER- MINERAL AND ENERGY RESOURCES- II(PART II)

ASSESMENT-7

Hydel Power

Consumption of electricity is a barometer of a nation's economic well-being and standard of living of its people. There are three types of electricity recognized depending on the raw material used and mode of production, viz:

- Hydroelectricity
- Thermal Electricity (Including steam, gas and oil)
- Nuclear Electricity

i) Hydroelectricity

It is renewable, cheap, clean and environment friendly source of energy and will be available to use in the future. India is blessed with huge water resources and there are vast possibilities of producing hydroelectricity.

Electricity generated from the force of water falling from a height is called Hydroelectricity.

Factors responsible for hydroelectricity power generation are-

1. Mountainous area where water falls from a height.
2. Permanent supply of water can be ensured by perennial rivers.
3. Climate should be suitable i.e. not so cold, not so warm.
4. Water of the river should be alluvial and silt free.
5. Flow of water should be uniform in the river.

Conditions those are favorable in South India especially in Western Ghats for construction of hydroelectricity-

1. In Western Ghats steep waterfalls are suited.
2. Western Ghats receives heavy rainfall by summer monsoon.
3. A few coal fields are available there.
4. Many industries are suited there, and they depend on hydel power.

Advantages

- It is inexhaustible and renewable.
- It is cheaper to build the dams.
- Hydel power projects do not cause any pollution.
- It is easy to transport for a long distance.

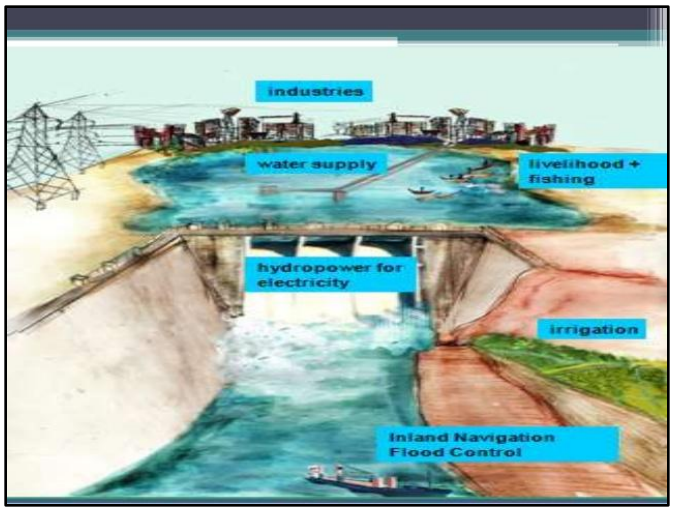
Disadvantages

- The supply of water may fluctuate.

- This power projects face the problem of silting.

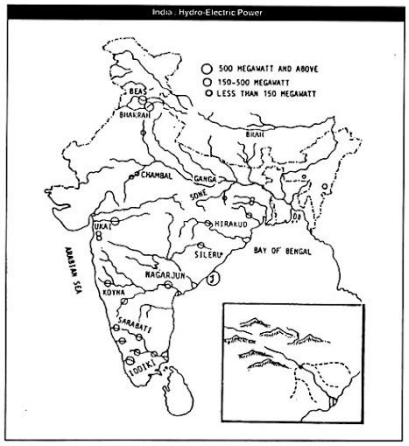
ii) Multipurpose projects

A multipurpose project is a large scale hydro project often including dams for water retention, canals for irrigation, water processing and power generation.



Benefits

- Generation of hydroelectric power can be possible.
- Irrigation can be available where rainfall is scanty.
- Floods are controlled in the rivers.
- River navigation can be developed.
- Afforestation for soil conservation.

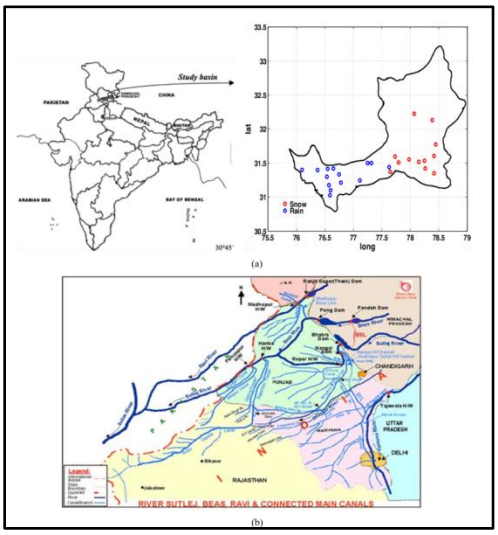


Important multipurpose projects

- Bhakra Nangal Project on river Sullej (Largest multipurpose project)
- Hirakud Project on river Mahanadi.
- Damodar Valley Project on river Damodar.
- Tungabhadra Project on river Tungabhadra.

- **<u>Bhakra Nangal Project-</u>**

It is constructed across the river Sullej at the site of Bhakra Gorge in the Siwaliks. It consists of two Dam Bhakra and Nangal and Pong Dam on river Beas.



<u>Benefits</u>

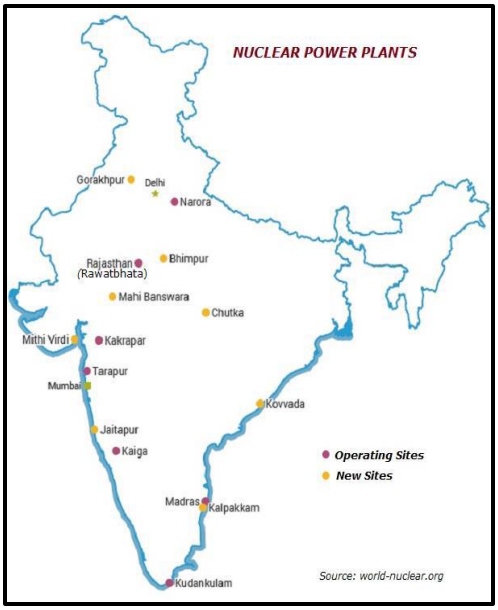
1. Hydroelectric power is generated from this project and power is supplied to Punjab, Haryana.
2. It provides power for industrial, agricultural and domestic use.
3. Electricity is used for tube well irrigation.
4. This project helps in controlling floods.
5. The other benefits are soil conservation, afforestation increase of crop production.
6. Different industries get benefit from this project.

- **<u>Hirakud Dam or Mahanadi River project</u>**-

It is located in Odisha in the lower valley of river Mahanadi. The main purpose of this project is to control floods.

<u>Benefits</u>

- Hirakud project makes valuable contribution to the industrial development of Odisha.
- Other benefits are soil conservation in Mahanadi valley, fish culture and water sports.



<u>Nuclear Power</u>

Nuclear energy is the energy that holds neutrons and protons. The main raw materials used for generation of atomic energy are Uranium, Plutonium, Beryllium and Thorium.

Nuclear Power station in India

The first nuclear power station was developed in Tarapur in 1969. Other plants are Kalpakkam in Tamil Nadu, Rana Pratap Sagar in Kota, Narora in Uttar Pradesh and Kakrapara in Gujrat.

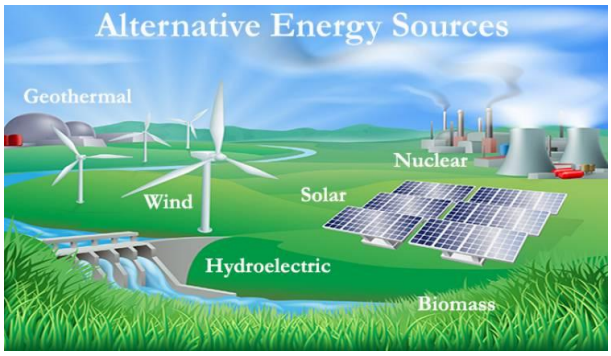
Advantages

1. Less use of fossil fuel lowers the greenhouse gas production.
2. Less amount of fuel is required.
3. The production of electric energy is continuous.
4. It is an alternative to fossil fuel.

5. It reduces the use of conventional energy resources like coal, petroleum.

Disadvantages

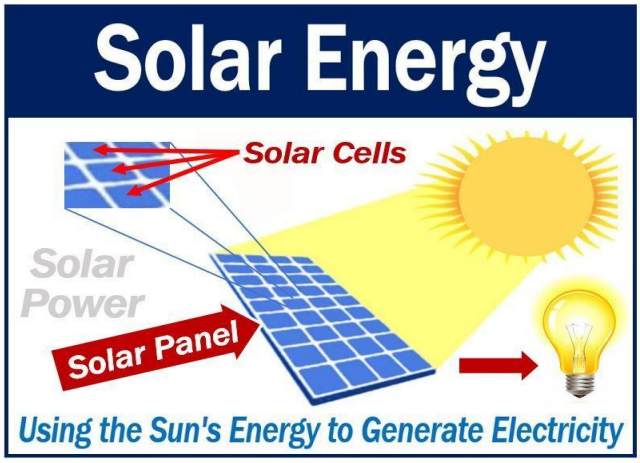
1. The process of mining and refining uranium represents a pollution hazard.
2. Radioactive wastes are extremely hazardous.
3. The radioactive waste can cause serious health effects on lives of people and environment.
4. Nuclear energy is very expensive
5. It is used to make weapons.



Non-Conventional Sources of Energy-

Energy generated by wind, solar, small hydro, tides, geothermal heat and biomass is known as non conventional energy.

The sun, water, wind have been the inexhaustible sources of energy from time immemorial.



Solar Energy

Sun is the primary source of energy. The sun provides us enormous amount of energy in the form of solar radiation. The examples of use of solar energy are solar heaters, ovens and cookers. Solar energy can be generated by using photo-volatile cells.

Advantages

1. It is indefinitely renewable.
2. It does not cause any pollution.
3. Solar panels require little maintenance.
4. The government also taking initiative for using solar energy.

Wind energy

It is also important source of non-conventional energy. Electricity from wind can be generated only in the areas of high wind velocity.

Advantages

1. It is clean energy source.
2. It is captured efficiently with today's technologies.
3. It does not cause any pollution.

Biogas

This technique is based on the decomposition of organic matter in the absence of air.

Advantages

1. It uses organic material and waste for its production.
2. No polluting gases are released.
3. They are easily available and are coast effective.

Tidal Energy

The height between high and low tides, known as tidal range is the key to the successful operation of energy power plant.

Advantages

1. It is renewable.
2. It is environment friendly.
3. It is predictable.
4. It has a long life span.

Assignment Questions

1. Write two advantages of non-conventional energy resource.
2. Mention two advantages generating power from bio-gas.
3. Which is the largest multipurpose project of India? Write two advantages of it.
4. Write two advantages of solar energy.
5. Write the favorable factors, responsible for hydro-electric power generation.

Pranamita Majumder

Date:2nd May,2020.

Chemistry Class 10

Chapter 3: acid,bases and salts(salt preparation)

- Preparation of soluble salts:It can be prepared by direct combination of two elements together.like Na and Cl2 reacts to form NaCl.A action of dilute acid on active metals(displacement) is another method.By decomposition of bicarbonates and carbonates by acids and chloride and nitrate by conc.H2SO4.Neutralisation reaction also produces salts.Soluble salts are always prepared in solution only.They are obtained by the evaporation of water followed by crystallization.

- Preparation of insoluble salts: Insoluble salts are formed mostly as precipitate.It can be prepared by direct combination like lead sulphide from Pb and S.It is prepared by combination of an acidic oxide with a basic oxide.like SO2 reacts with CaO to give CaSO3.By double decomposition reaction also it can be prepared wherein a soluble salt react with acid or another soluble salt to form insoluble precipitate and another acid it salt.like barium chloride(soluble salt) reacts with sulphuric acid to give BaSO4(precipitate) and HCl.An insoluble salt can also be prepared from another insoluble salt by double decomposition but the insoluble is first converted to soluble salt which is then used for preparing desired salt Eg lead sulphate preoared from insoluble lead carbonate first converting it to lead nitrate(using nitric acid) then it is treated with sulphuric acid to get lead sulphate.

- Silver chloride and barium sulphate is usually prepared by reacting aqueous siber nitrate with dil HCl and barium chloride with H2SO4.

- Laboratory preparation of certain salts: i)Iron chloride prepared by synthesis.This salt being deliquescent is kept dry using calcium chloride.

- Salts like CuSO4,ZnSO4 can be prepared by action of dil acid on insoluble base.Other salts prepared by thus method are lead nitrate,calcium chloride,calcium nitrate,magnesium sulphate

- Zinc sulphate and iron sulphate can be prepared by action of dil acid on an active metal(Zn,Fe) by the process of crystallization

- Lead chloride and calcium ca4bonate can be prepared by double decomposition or precipitation reaction.Chloride of Pb,Ag,Hg and sulphate of Ba,Pb,Ca are also preoared like this

- Calcium carbonate prepared by adding sodium carbonate solution to a hot solution of

calcium chloride in a beaker.The carbonates of all metals except Na,K and ammonium ate prepared like this.

- Neutralisation is another method of preparation of salts like sodium sulphate.
- Salts have certain properties which includes:

  Properties: Efflorescence is the phenomenon where a compound loses its water of c on exposure to dry air which results in the loss of crystalline shape and finally crumbling.Eg:washing soda,epsom salt.

  Deliquescence is the property where substances absorb moisture from the atmosphere become moist lose their crystalline structure and ultimately dissolve in the absorbed solution forming saturated solution.Eg:NaOH,KOH,$MgCl_2$. Another property is **hygroscopy** which is similar to deliquescence ie absorb water from atmosphere but the difference is do not absorb enough water to form solutions.Eg: concentrated sulphuric acid,quicklime

- **Drying agents** are substances that can readily absorb moisture from other substances without chemically reacting to it whereas **dehydrating substances** are agents that can remove even the chemically combined water molecules from compounds.Drying agents represent physical change but dehydrating agent represent chemical change.Eg:CaO(drying agent),concentrated sulphuric acid(acts as both).

ASSIGNMENT

1. Write balance equation for the preparation of the following:

   a) soluble sulphate by action of acid on insoluble base

   b) insoluble salt by action of acid on another salt

   c) insoluble base by the action of soluble base on soluble salt

   d) soluble sulphate by the action of an acid on metal.

2.Match the following:

Zinc sulphate.	Precipitation
Ferrous sulphate.	Oxidation
Barium sulphate.	Displacement
Ferric sulphate.	Neutralisation
Sodium sulphate.	Synthesis.

3. Write balance equation for the following

a) lead sulphate from lead nitrate and dil sulphuric acid

b) copper sulphate from copper and concentrated sulphuric acid

4.Name a salt repared by direct combination.Write an equation to show its preparation

5.Define neutralisation.Give an example of salt prepared this way

DREAMLAND SCHOOL
CLASS X
ENGLISH LANGUAGE
ASSIGNMENT 7
ACADEMIC YEAR-2020-21

DATE- 2nd MAY 2020

I. READ THE FOLLOWING PASSAGE CAREFULLY AND ANSWER THE QUESTIONS THAT FOLLOW:

Greyhound racing is the sixth most popular spectator sport in the United States. Over the last decade a growing number of racers have been adopted to spend their retirement as household pets, once their racing careers are over.

Many people hesitate to adopt a retired racing greyhound because they think only very old dogs are available. Actually , even champion racers only work until they are about three-and-a-half years old. Because greyhounds usually live to be 12 to 15 years old, their retirement is much longer than their racing careers.

People worry that a greyhound will be more nervous and active than other breeds and will need a large space to run. These are false impressions. Greyhounds have naturally sweet, mild dispositions, and while they love to run, they are sprinters rather than distance runners and are sufficiently exercised with a few daily laps around a fenced- in backyard.

Greyhounds do not make good watchdogs, but they are very good with children, get along well with other dogs and are loyal. They are intelligent, well-behaved dogs, usually housebroken in only a few days. A retired greyhound is a wonderful pet for almost anyone.

1. Give the meaning of each word as used in the passage:
a. hesitate
b. disposition
c. housebroken

2. Answer the following questions briefly:
a. According to the passage, why is it a good idea to adopt a greyhound?
b. What form of exercise do greyhounds require?
c. What is the one drawback the author mentions of adopting a greyhound?

3. Summarize the passage in not more than 50 words.

II. Fill in the blanks with appropriate words:

1. London is_____ the river Thames.
2. Sunita got _____ the bus.
3. The smugglers anchored the boat a mile _____ the coast.
4. Maria went _____ the border and reached the other side.
5. I went for a walk _____ the river bank.
6. Sema sat _____ the table to study.
7. Humpty- Dumpty fell _____ the wall.
8. Hilary ran _____ the stairs.
9. The ball fell _____ the well.
10. There was trouble _____ the street.
11. Lucas was suffering _____ laryngitis.
12. Rashid had fallen asleep _____ the armchair.
13. The retired soldier spoke _____ the war.

14. India abounds _____ natural resources.
15. We are proud _____ Sachin Tendulkar.
16. Tania cannot get _____ her loss.
17. This book runs _____ 180 pages.
18. Open your books _____ page 180.
19. While returning home he met _____ an accident.
20. He came across the rare book _____ accident.

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